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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,993	02/02/2004	Kazutoshi Kan	520.43378X00	5920
<div>20457      7590      02/04/2008</div> <div>ANTONELLI, TERRY, STOUT &amp; KRAUS, LLP</div> <div>1300 NORTH SEVENTEENTH STREET</div> <div>SUITE 1800</div> <div>ARLINGTON, VA 22209-3873</div>				
			<div>EXAMINER</div> <div>BOWERS, NATHAN ANDREW</div>	
			<div>ART UNIT</div> <div>1797</div>	<div>PAPER NUMBER</div>
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/767,993	Applicant(s) KAN ET AL.	
	Examiner Nathan A. Bowers	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Applicant's request for reconsideration of the finality of the last Office Action is persuasive and, therefore, the finality of that action is withdrawn.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1) Claims 1-7 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ammann (US 20020137197) in view of Felder (US 6467285) and Barbera-Guillem (US 20030040104).

With respect to claims 1, 2 and 10, Ammann discloses an apparatus comprising a first chamber (Figure 1:50) and a plurality of second chambers (Figure 3:600,602,604,606) that are positioned within the first chamber. Paragraphs [0122] and [0123] indicate that the second chambers act as incubators that operate under controlled temperatures. An inlet/outlet (Figure 3:150) is provided within the first chamber, and a manipulator is provided for moving samples from the inlet/outlet to each of the second chambers. This is described in paragraph [0103]. Ammann, however, does not expressly state that plurality of inlet/outlet access points are provided.

At the time of the invention, it would have been obvious to provide the apparatus of Ammann with a plurality of inlet/outlets. This would have allowed one to simultaneously add or remove samples from the first chamber, and thereby increase the efficiency of the operation. Such an alteration to the construction of the Ammann device would not require the addition of features not already described by Ammann, but would only require the duplication of features (inlet/outlet) already presented. Mere duplication of parts has no patentable significance unless a new and unexpected result is produced. See MPEP 2144.04.

The apparatus of Ammann still differs from Applicant's claimed invention because Ammann does not clearly indicate that the inlet/outlet functions as an air-lock.

Felder discloses the culturing apparatus as described above. Column 5, line 25 to column 6, line 62 states that the inlet/outlet air-lock includes a first door (Figure 3:62) and a second door (Figure 3:61) that work to regulate the transport of materials into the first chamber.

Ammann and Felder are analogous art because they are from the same field of endeavor regarding biological sample storage devices.

At the time of the invention, it would have been obvious to modify the existing inlet/outlet structures disclosed by Ammann so that they each include a first door that opens into the first chamber and a second door that opens into the outside environment. As evidenced by Felder, this two-door air-lock arrangement is considered to well known in the art, and would have been beneficial if implemented in the system of Ammann. The use of a double door air-locks would have ensured that contamination is not allowed to enter into the first chamber of Ammann.

The combination of Ammann and Felder still differs from Applicant's claimed invention because the combination does not clearly indicate that each of the plural number of air-lock type inlet/outlets includes at least one check valve.

Barbera-Guillem discloses an automated cell culturing system that comprises a first chamber (Figure 2:12) as well as a plurality of second chambers (Figure 3:22) positioned within the first chamber. Paragraph [0038] describes the plurality of second chambers as cell culture devices capable of facilitating cell growth. Paragraph [0037] indicates that the first chamber includes a check valve (Figure 2:16) capable of regulating the pressure within the first chamber.

Ammann, Felder and Barbera-Guillem are analogous art because they are from the same field of endeavor regarding biological sample storage devices.

At the time of the invention, it would have been obvious to provide the first chamber disclosed by Ammann with at least one check valve capable of regulating the pressure level during cell culturing. In paragraph [0037], Barbera-Guillem teaches that pressure valves are “standard components of typical tissue culture incubators as known to those skilled in the art of cell culture.” It would have been beneficial to maintain appropriate pressure levels using check valves in the first chamber of Ammann so that cellular samples are exposed to suitable conditions during transport within the first chamber.

With respect to claim 3, Ammann, Felder and Barbera-Guillem disclose the apparatus set forth in claim 1 as set forth in the 35 U.S.C. 103 rejection above. Although Barbera-Guillem only discloses the use of a single pressure valve, it would have been obvious to add a second pressure valve on a side surface portion opposing to the outside of the culturing apparatus. This would have allowed one to alter the pressure within the first chamber by affecting air flow between the first chamber and exterior environment by moving air through the air-lock units. The addition of extra pressure valves merely a duplication of known parts that does not carry significant weight when determining patentability. See MPEP 2144.04. The addition of a second valve does not patentably distinguish over a prior art reference (such as Barbera-Guillem) disclosing only a single valve.

With respect to claims 4 and 7, Ammann, Felder and Barbera-Guillem disclose the apparatus set forth in claim 1 as set forth in the 35 U.S.C. 103 rejection above. Ammann additionally indicates that the second chamber incubators (Figure 3:600,602,604,606) each include a turntable (Figure 22:671) able to hold an integrated vessel. Each incubator additionally comprises a door (Figure 23B) that allows the manipulator to interact with the turntable. This is disclosed in paragraphs [0237]-[0274].

With respect to claims 5, 6, 11, 12, 13 and 14-16, Ammann, Felder and Barbera-Guillem disclose the apparatus set forth in claim 1 as set forth in the 35 U.S.C. 103 rejections above. In addition, Ammann states that the temperature is controlled within the first and second chambers, and that fluids are moved from a supply source to the sample vessels that interact with the second chambers. Paragraphs [0016] and [0017] state that a computer controller is utilized to regulate the incubation and sample transportation protocol.

2) Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ammann (US 20020137197) in view of Felder (US 6467285).

Ammann discloses an apparatus comprising a first chamber (Figure 1:50) and a plurality of second chambers (Figure 3:600,602,604,606) that are positioned within the first chamber. Paragraphs [0122] and [0123] indicate that the second chambers act as incubators that operate under controlled temperatures. An inlet/outlet (Figure 3:150) is provided within the first chamber, and a manipulator is provided for moving samples from the inlet/outlet to each of the

second chambers. This is described in paragraph [0103]. Ammann, however, does not expressly state that plurality of inlet/outlet access points are provided.

At the time of the invention, it would have been obvious to provide the apparatus of Ammann with a plurality of inlet/outlets. This would have allowed one to simultaneously add or remove samples from the first chamber, and thereby increase the efficiency of the operation. Such an alteration to the construction of the Ammann device would not require the addition of features not already described by Ammann, but would only require the duplication of features (inlet/outlet) already presented. Mere duplication of parts has no patentable significance unless a new and unexpected result is produced. See MPEP 2144.04.

The apparatus of Ammann still differs from Applicant's claimed invention because Ammann does not clearly indicate that the inlet/outlet functions as an air-lock.

Felder discloses the culturing apparatus as described above. Column 5, line 25 to column 6, line 62 states that the inlet/outlet air-lock includes a first door (Figure 3:62) and a second door (Figure 3:61) that work to regulate the transport of materials into the first chamber.

Ammann and Felder are analogous art because they are from the same field of endeavor regarding biological sample storage devices.

At the time of the invention, it would have been obvious to modify the existing inlet/outlet structures disclosed by Ammann so that they each include a first door that opens into the first chamber and a second door that opens into the outside environment. As evidenced by Felder, this two-door air-lock arrangement is considered to well known in the art, and would have been beneficial if implemented in the system of Ammann. The use of a double door air-



locks would have ensured that contamination is not allowed to enter into the first chamber of Ammann.

3) Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ammann (US 20020137197) in view of Felder (US 6467285) and Barbera-Guillem (US 20030040104).

With respect to claim 18, Ammann and Felder disclose the apparatus set forth in claim 17 as set forth in the 35 U.S.C. 103 rejections above, however the combination does not clearly indicate that each of the plural number of air-lock type inlet/outlets includes at least one check valve.

Barbera-Guillem discloses an automated cell culturing system that comprises a first chamber (Figure 2:12) as well as a plurality of second chambers (Figure 3:22) positioned within the first chamber. Paragraph [0038] describes the plurality of second chambers as cell culture devices capable of facilitating cell growth. Paragraph [0037] indicates that the first chamber includes a check valve (Figure 2:16) capable of regulating the pressure within the first chamber.

Ammann, Felder and Barbera-Guillem are analogous art because they are from the same field of endeavor regarding biological sample storage devices.

At the time of the invention, it would have been obvious to provide the first chamber disclosed by Ammann with at least one check valve capable of regulating the pressure level during cell culturing. In paragraph [0037], Barbera-Guillem teaches that pressure valves are “standard components of typical tissue culture incubators as known to those skilled in the art of cell culture.” It would have been beneficial to maintain appropriate pressure levels using check

valves in the first chamber of Ammann so that cellular samples are exposed to suitable conditions during transport within the first chamber.

With respect to claim 19, Ammann, Felder and Barbera-Guillem disclose the apparatus set forth in claim 18 as set forth in the 35 U.S.C. 103 rejection above. Although Barbera-Guillem only discloses the use of a single pressure valve, it would have been obvious to add a second pressure valve on a side surface portion opposing to the outside of the culturing apparatus. This would have allowed one to alter the pressure within the first chamber by affecting air flow between the first chamber and exterior environment by moving air through the air-lock units. The addition of extra pressure valves merely a duplication of known parts that does not carry significant weight when determining patentability. See MPEP 2144.04. The addition of a second valve does not patentably distinguish over a prior art reference (such as Barbera-Guillem) disclosing only a single valve.

#### ***Response to Arguments***

Applicant's arguments and amendments filed 09 January 2008 with respect to the 35 U.S.C. 102 rejections involving Felder have been fully considered and are persuasive. These rejections have been withdrawn.

Applicant's arguments filed 09 January 2008 with respect to the 35 U.S.C. 103 rejections involving the combination of Ammann and Felder have been fully considered and are persuasive. Therefore, these rejections have been withdrawn. However, upon further consideration, a new

ground of rejection is made in view of the combination of Ammann, Felder and Barbera-Guillem.

Barbera-Guillem addresses the deficiencies of Ammann by indicating that it is well known in the art to provide an incubator storage device with a check valve capable of regulating the pressure within the interior of the holding chamber.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan A. Bowers whose telephone number is (571) 272-8613. The examiner can normally be reached on Monday-Friday 8 AM to 5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



NAB



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